

REMARKS

Entry of the foregoing and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 1-10 are pending. By the present response, claims 4 and 10 have been canceled, and claims 1, 8 and 9 have been amended. Claims 1, 8 and 9 as amended now all include the feature "the duct extends from a cavity arranged in the mould and through the locking plate" of previous claim 4, as well as the feature "the press pins engage the ejectors and press the ejectors into the cavity". This latter feature is supported by the specification on page 8 lines 20-21. Furthermore, claim 9 has been amended to include the features of previous claim 10. Also, the opportunity has been taken to correct the typographical error in claim 8, so that this claim now correctly refers to an "ejector arrangement". Thus, upon entry of the present response, claims 1-3 and 5-9 remain pending and await further consideration on the merits.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,297,951 to Asai (hereafter "*Asai*") in view of U.S. Patent No. 5,731,014 to Travaglini (hereafter "*Travaglini*") on the grounds set forth in paragraph 4 of the Official Action. For at least the reasons noted below, and to the extent that it would be maintained in view of the claim amendments herein, this rejection should be withdrawn.

Applicant discloses an ejector arrangement in an injector mould. With reference to the exemplary embodiment depicted in Figure 1a, the ejector arrangement comprises ejectors **7**, which are received in ducts **3**. Figure 1a and the discussion of this embodiment on pages 6-8 of the specification disclose, the ducts extend from the cavity **4**, through to the rear side **5** of the mould half **2a** and then continue through the locking plate **21** in the form of through ducts **22**. In the exemplary embodiment depicted in Figure 1a, the concentric ducts created by this arrangement are adapted both to receive the ejectors and to accommodate a pressure plate **30** and its press pins **31**. With this arrangement, the press pins **31** may engage the ejectors **7** without an intermediary connection plate or other connecting means.

The above features and advantages are generally embodied in Applicant's claims. For example, amended claim 8 is directed to an ejector arrangement in an injector mould, the ejector arrangement comprising ejectors which, in parting of mould halves included in the mould, are adapted to eject a component formed therein, and a pressure plate for actuating the ejectors, wherein the ejectors in their non-actuated state are completely, or essentially completely, received in ducts formed in a first of said mould halves and the pressure plate has press pins which, in parting of the mould halves, are adapted to apply a force to the ejectors to cause said ejection, in which the duct extends from a cavity arranged in the mould and through the locking plate and the press pins engage the ejectors and press the ejectors into the cavity.

Furthermore, amended claim 1 is directed to an injection mould, which has such an ejector arrangement. Also, amended claim 9 is directed to a modular injection mould.

As presently claimed, the ducts extend from a cavity arranged in the mould and through a locking plate. Because the ducts retaining the ejectors extend through the locking plate, and because the press pins engage the ejectors directly, and because of other features of the ejector arrangement, it is possible to form a mould having several advantages, including a dimensional stability which is superior to previously known moulds. See, e.g., page 3, line 25 to page 4, line 7 of the specification.

In contrast to Applicant's independent claims, *Asai* describes a mould in which the ejector (7) is connected to a connection plate (7A). Connection plate 7A is arranged in a guide chamber (28) forming a recess in the mould, together with resetting means (8A). The connection plate is, in turn, retained in the recess by a locking plate (25), and engaged by press pins (9A). In *Asai*, the duct receiving the ejector does not extend through the locking plate, and the press pins do not engage the ejector.

Travaglini fails to cure these deficiencies of *Asai*. In *Travaglini*, a mould is described (Figure 3), wherein ejector pins (62) are connected to a connection plate (60). This connection plate is arranged in a recess and retained by a mold base (54) and movable piece (82) which actuates the ejector pins (62) by a cam action. In the mould represented by *Travaglini* as "prior art" (Figure 2a), a similar analysis can be made. Therefore, this reference also fails to teach that the ducts extend through the locking plate or that the press pins engage the ejectors.

Therefore, *Asai* and *Travaglini* together do not show all elements of the claims in question, since the ejector ducts shown in these references do not “extend from a cavity arranged in the mould and through the locking plate”. Neither do the references, together or in isolation, teach the feature that the “press pins engage the ejectors and press the ejectors into the cavity”. Thus, the references cited fail to teach or suggest all of the claim limitations, which is a basic criterion for establishing a *prima facie* case of obviousness (see M.P.E.P. §2143.03).

Applicant further submits that, starting from either *Asai* or *Travaglini*, extension of the ducts through the mould and through the locking plate, as presently claimed, would make no sense to the skilled person, because the connection plate in either *Asai* or *Travaglini* can be engaged by press pins at any location of the connection plate, independent of where the ejector ducts are located in the mould. Neither of the references provides the skilled person with any motivation to modify prior art moulds in such a way as to come up with the features of the claims. The motivation to combine references is another basic criterion for establishing a *prima facie* case of obviousness (see M.P.E.P §2143.01).

Because at least two of the basic criteria for establishing a *prima facie* case of obviousness have not been established, Applicant respectfully requests that the rejection under 35 U.S.C. §103 be withdrawn.

In addition, Applicant would like to reiterate that the technically superior effect obtained by the mould as claimed is not demonstrated through the teaching of either *Asai* or *Travaglini* or any combination thereof. By arranging the ejectors such that their associated ducts extend through the locking plate, and by arranging the system such that there is a pressure plate with press pins that engage the ejectors, it is

possible to dispense with the recess found in prior art moulds (7A in Fig. 1 of Asai; 36 in Fig. 2a of *Travaglini*). This, in turn, leads to a mould with advantages, such as a superior dimensional stability. These advantages are discussed in detail in the specification on the bottom half of page 2.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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